

Economics

6 September 2011 | 33 pages

Inside the S&P 500

Margins: More than a Temporary Pause

- We don't expect recession. We don't expect a decline in profits. Yet we expect a marked slowdown in profits *growth* with sharp cuts to earnings estimates shortly ahead.
- We must acknowledge the recent profits impact of an expanding federal deficit and drop in national savings that created cost-free demand for firms. Private compensation is no higher than the previous cycle peak while nominal GDP is \$581 billion higher. National operating profits have doubled from the 4Q 2008 trough, but our estimates show profits roughly 20% higher than they otherwise would be because of deficit-financed transfers and spending.
- While a risk, in the remainder of 2011 and 2012, we expect no sharp fiscal tightening. But a further increase in federal demand is also likely to be absent. As such, we expect corporate profits to grow more closely to revenue growth rates. Incrementally, revenues will need to be driven by private business expansion and employee compensation, the costs and revenues of other firms. Individual firms cutting costs would prove self-defeating for aggregate profits at the present stage of the cycle.
- Following recent cuts, we now see two-sided risks again to our corporate earnings forecast. A sharp shift up in the growth rate of private economic activity would still boost profits faster than labor income. But we expect corporate earnings to grow at a roughly 4% annual rate over the balance of the expansion. It's questionable if this assumption is bullish or bearish for markets. Trend real growth assumptions in the TIPS market are close to zero and even weaker in some other measures.
- In 2012, we've ratcheted down our expectations for S&P 500 EPS to a 4% gain and \$101 per share with modest EPS declines in Energy and Materials. The bottom-up consensus predicts a 14% EPS gain with growth in every sector. For cyclical industries, Street estimates appear about 20% too high for 2012. In a recession, our estimates would be roughly half the consensus level for the most cyclical of industries.

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See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

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Consider Why Profits Outpace Recovery

As the public debates the value and wisdom of government steps to boost the economy and the inadequacy of the labor market recovery, investors and managements of large firms (and many small) have just enjoyed a rather brilliant “V-shaped” recovery in corporate profits (see figure 1).

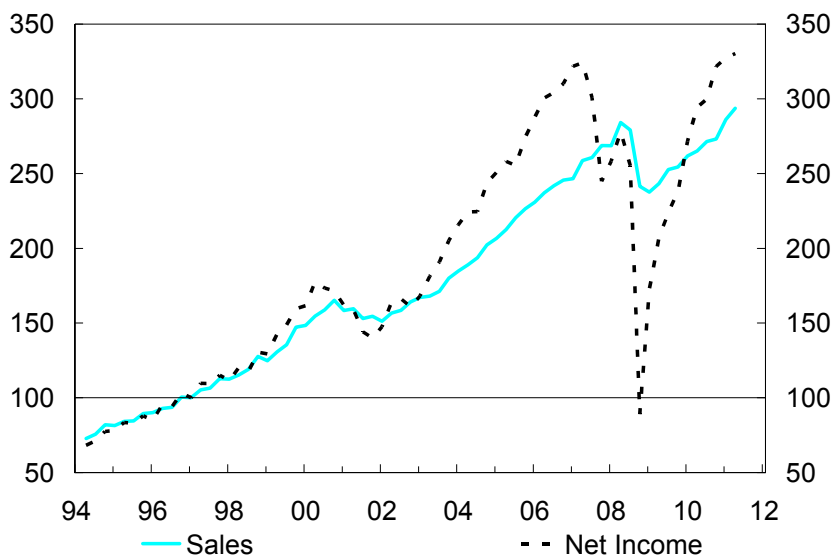
The dollar level of nominal profits in the second quarter 2011 reached an all-time high in the U.S. national accounts data. It also reached all-time highs for measures of (non-GAAP) operating profits for the S&P 500 index and even GAAP profits, measured either before or after changes in share count.

2Q marked nominal record highs in most every profit measure.

The profits measures are only slightly higher now than one would expect based on long-term trend projections, extrapolations blind to current conditions in the economy. Profit levels *lead* investment and hiring, and represent the most optimistic indicators for future economic activity. However, it is unusual for profits to have recovered so fully and “normalized” when employment and current output has lagged so far behind trend.

As detailed in forecast updates of August 8 and 18, policy uncertainty and weak business and consumer confidence suggest more sluggish growth than our earlier expectations. In the absence of larger, effective steps to boost the pace of recovery, we believe profits will grow at a 4% growth rate in 2012 and roughly the same pace on average over the balance of the expansion (see figure 2 and appendix 1). With this edition of *Inside the S&P 500*, we have updated industry sector EPS estimates to now match that macro-level expectation (see figures 3-4).

Figure 1. S&P 500 Operating EPS and Revenue Indices 1Q 1997=100



Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 2. Citi Real U.S. GDP and S&P 500 Operating EPS History and Estimates, Consensus

Y/Y%	U.S. Real GDP	4Q/4Q % Chg	S&P 500 Oper EPS level	% chg	"Bottom Up" EPS Consensus	% chg
2008	-0.3	-3.3	61.79	-26.8	61.79	-26.8
2009	-3.5	-0.5	62.05	0.4	62.05	0.4
2010	3.0	3.1	85.49	37.8	85.49	37.8
2011e	1.6	1.2	97.00	13.5	99.17	16.0
2012e	2.1	2.5	101.00	4.1	113.50	14.4

Source: S&P, Thomson Financial, Bloomberg, Bloomberg, Citi Investment Research and Analysis

Figure 3. S&P 500 Sector EPS Growth (%) Forecasts: Consensus vs. Citigroup (GICS Classifications)

	Consensus:						Citi Forecast			
	Aug 2011									
	2005	2006	2007	2008	2009E	2010E	2011F	2012F	2011F	2012F
S&P 500 Total	13.8	15.2	(4.1)	(26.8)	0.4	38	18	13	14	4
Consumer Discretionary	(2)	7	(12)	(52)	53	48	19	12	17	2
Consumer Staples	7	6	10	11	3	6	7	10	6	5
Energy	51	23	4	19	(59)	51	19	16	28	(5)
Financials	7	24	(33)	(-132)*	243.3*	115	13	20	9	6
Health Care	10	8	12	8	1	12	6	6	8	5
Industrials	19	14	12	(1)	(34)	28	15	18	16	7
IT	17	11	17	3	(8)	43	17	9	15	6
Materials	22	30	6	(7)	(51)	85	34	15	36	(6)
Telecom Services	14	19	24	(9)	(24)	(4)	36	15	6	8
Utilities	16	11	13	1	(2)	5	(1)	(1)	4	4

Sources: Bloomberg and Citi Investment Research and Analysis.

Figure 4. S&P 500 Sector Earnings and Market Cap as Percent of Total

Sector	Citigroup Estimated Sector Earnings Share of Total S&P (%)					Change in Earnings Share (Pct Pts)				Market Cap %	PE Multiples			
	2008	2009	2010	2011	2012	2009	2010	2011	2012		2009	2010	2011	2012
S&P 500														
Consumer Discretionary	5.4	8.4	9.0	9.3	9.1	3.0	0.6	0.3	(0.1)	10.7	19.9	17.2	14.3	14.0
Consumer Staples	13.3	13.3	10.2	9.6	9.7	0.1	(3.1)	(0.7)	0.1	11.4	14.9	15.1	14.8	14.1
Energy	25.9	10.9	11.9	13.4	12.3	(15.0)	1.0	1.5	(1.1)	12.4	18.4	14.7	11.4	12.0
Financials	(8.3)	11.9	18.5	17.8	18.2	20.2	6.6	(0.8)	0.4	14.1	21.1	12.6	9.9	9.3
Health Care	17.7	17.9	14.5	13.8	14.0	0.2	(3.4)	(0.7)	0.2	11.8	12.3	10.9	10.6	10.1
Industrials	15.2	10.5	9.7	9.9	10.3	(4.7)	(0.8)	0.2	0.3	10.5	17.0	16.4	13.1	12.3
IT	17.4	16.5	17.0	17.2	17.6	(0.9)	0.6	0.2	0.4	18.7	21.1	15.9	13.5	12.7
Materials	4.3	2.0	2.7	3.3	3.0	(2.2)	0.7	0.5	(0.3)	3.6	30.7	19.9	13.5	14.4
Telecom Services	4.6	3.8	2.7	2.5	2.6	(0.8)	(1.2)	(0.2)	0.1	3.1	14.4	17.0	15.7	14.6
Utilities	4.6	4.7	3.6	3.3	3.3	0.1	(1.1)	(0.3)	0.0	3.7	13.7	13.3	13.8	13.3

Source: Citi Investment Research and Analysis

2Q Revs Strong, But Already, Margins Barely Expanded

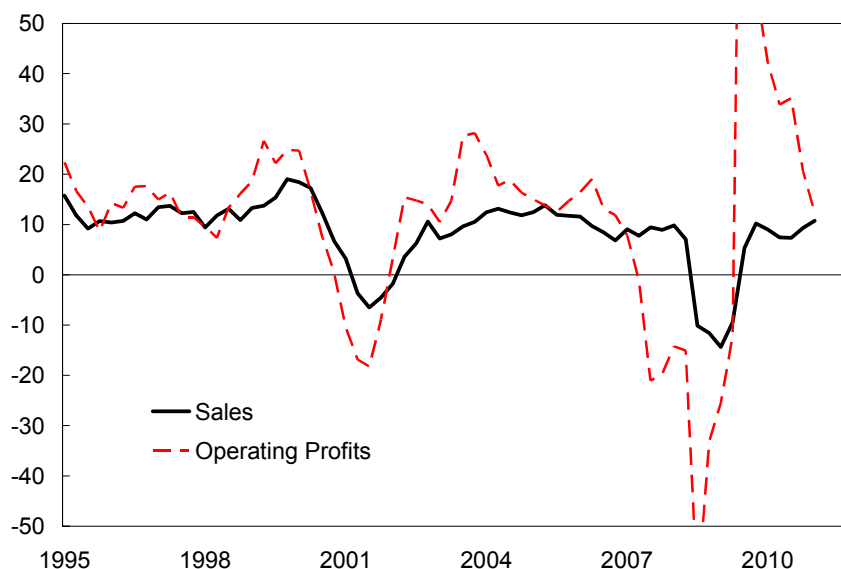
As figure 5 shows, profits and revenues both expanded briskly, at a 12% and 11% pace, respectively, in the year through 2Q 2011. Slowing from the sharp margin expansion of the past two years, the pace of profit gains relative to revenues has thus slowed toward 1/1 already. (Note: Share count for the S&P 500 rose just less than 1% over the past year.)

Revenues grew a strong 11% in the year through 2Q 2011, but EPS little stronger.

Revenues in the energy sector expanded more than 30% in the year through 2Q with operating profits up more than 40%. This contributed about four percentage points to the overall S&P 500 earnings growth rate and three percentage points to the revenue growth rate. Ex energy, S&P 500 revenues grew 7% and EPS 8%, rounded. (see figures 6-7).

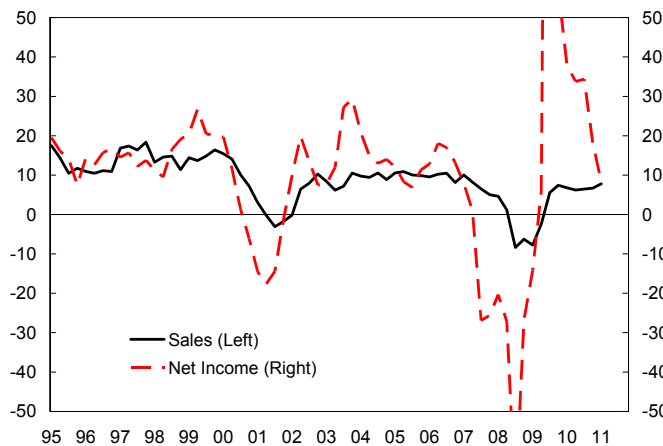
With a 13% share of annualized S&P earnings, and a much smaller share of total business costs, the energy sector (in essence the oil price), will do much to determine the strength of S&P index profits in the year ahead. As figure 8 shows, current crude oil futures pricing suggests a very small negative contribution from the energy sector next year, but this is a quite volatile and unpredictable assumption.

Figure 5. S&P 500 Operating Income and Net Sales Y/Y%



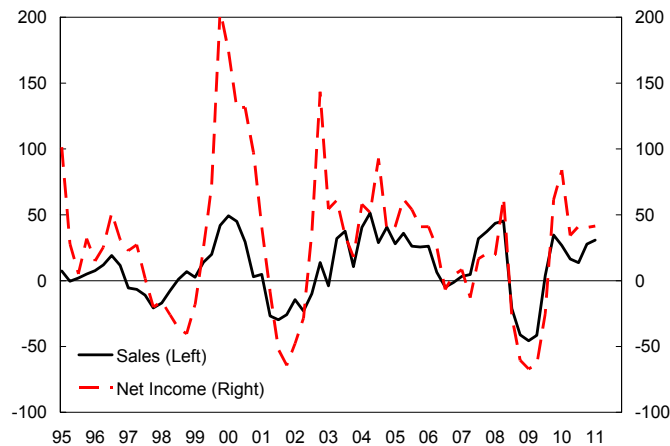
Source: S&P, Thomson Financial, Factset, Citi Investment Research and Analysis Note: Figure shown with values constrained to +/- 50%

Figure 6. S&P 500 (Ex-Energy) Operating Income and Net Sales, Y/Y%



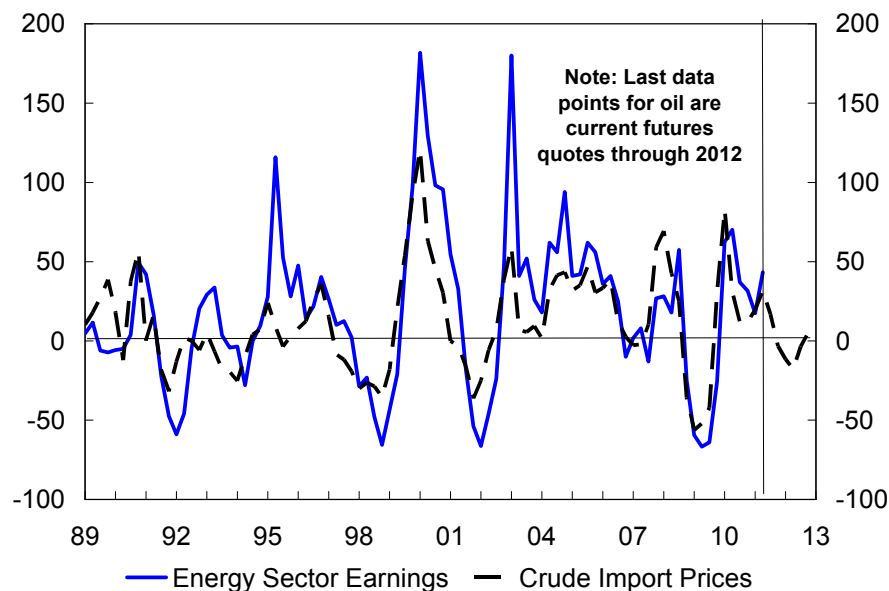
Sources: S&P, Thomson Financial, Factset, Citi Investment Research and Analysis
Note: Figure shown with values constrained to +/- 50%.

Figure 7. S&P 500 Energy Sector Operating Income and Net Sales, Y/Y%



Sources: S&P, Thomson Financial, Factset, Citi Investment Research and Analysis
Note: Figure shown with values constrained to + 200%.

Figure 8. S&P 500 Energy Sector Net Income and Crude Oil Y/Y % Changes

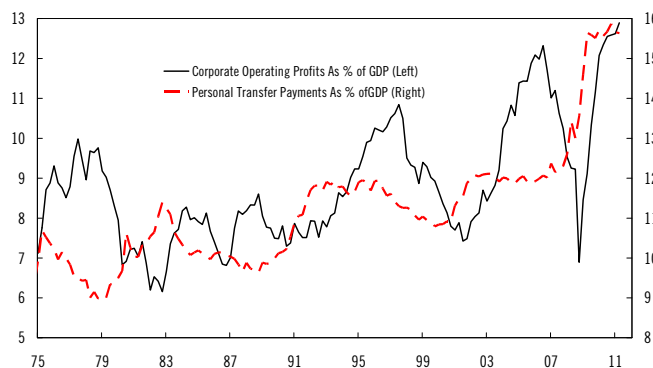


Source: S&P, Factset, Haver Analytics, Bloomberg, Citi Investment Research and Analysis

New all-time highs in consumer demand without new highs in private compensation.

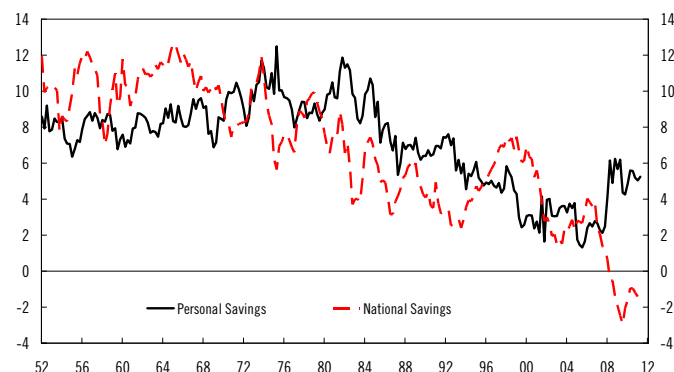
More fundamental to the profits outlook than the high S&P index exposure to energy is the questionable driver of sales in recent years. As figures 9-10 show, transfer payments of income rose by three percent of GDP above trend in recent years, much of which was an automatic response to the severe recession. Along with a peak effect of tax cuts of two percent of GDP, deficit financing boosted personal savings by five percentage points recently during the peak impact. While partly a timing mismatch as demand leads employment, fiscal easing has helped drive consumer spending to significant new highs while private wage compensation is still just shy of the 1Q 2008 peak (see figure 11).

Figure 9. Corporate Operating Profits and Government Transfer Payments to Persons As % of GDP



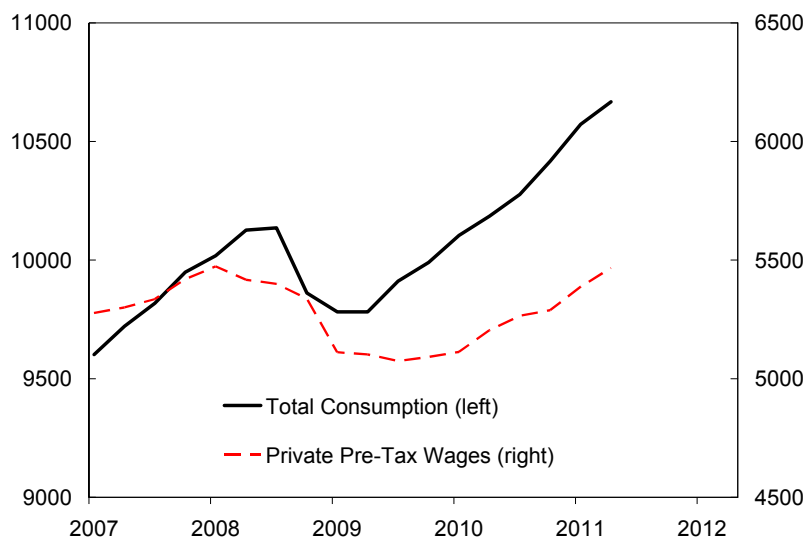
Sources: BEA

Figure 10. Personal Savings as % of Disposable Income vs Net National Savings as % of GDP



Sources: BEA, FRB

Figure 11. Nominal U.S. Consumer Spending and Private Wages (Pre-Tax), Billions of \$



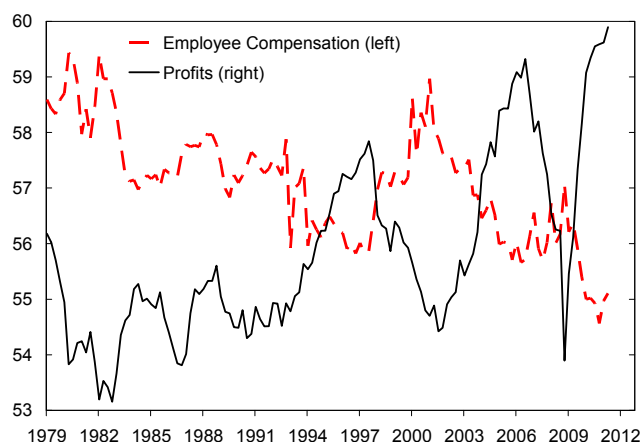
Source: Citi Investment Research and Analysis

Borrowing and spending 9% of GDP has had an effect on employment that we'll refrain from discussing for the moment. But spending is spending. Financing it through federal deficits converts *stocks* of past savings from Treasury investors into *flows* of current income, while raising debt.

A fundamental recovery in profits was real, but fiscal easing made it extraordinary.

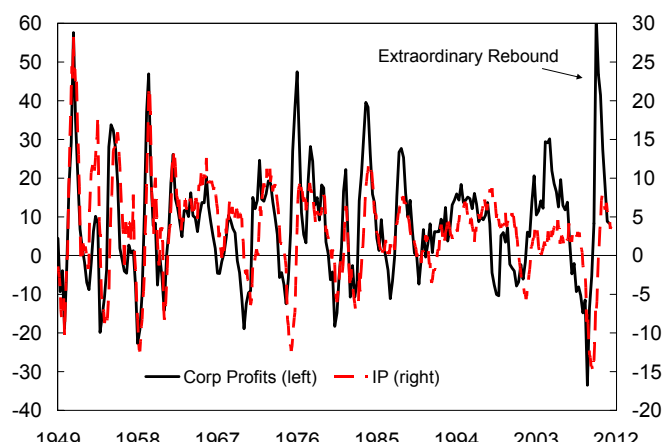
For an example of the effect, consider that when a recipient of extended unemployment insurance or supplemental food assistance spends these deficit-funded transfer payments, it generates sales for firms, but with no compensation costs, thus boosting profits, and in this case, incremental margins. The lower trend in the compensation share of GDP in the recovery and much higher trend in corporate profits is partly cyclical, reversing the relative collapse in profits in late 2008 (see figure 12). But as figure 13 also suggests, the profit rebound has been *abnormally* strong in the past two years.

Figure 12. National Corporate Operating Profits and Employee Compensation as % of GDP



Sources: BEA

Figure 13. National Corporate Operating Profits and Industrial Production Y/Y% Changes



Sources: BEA, FRB

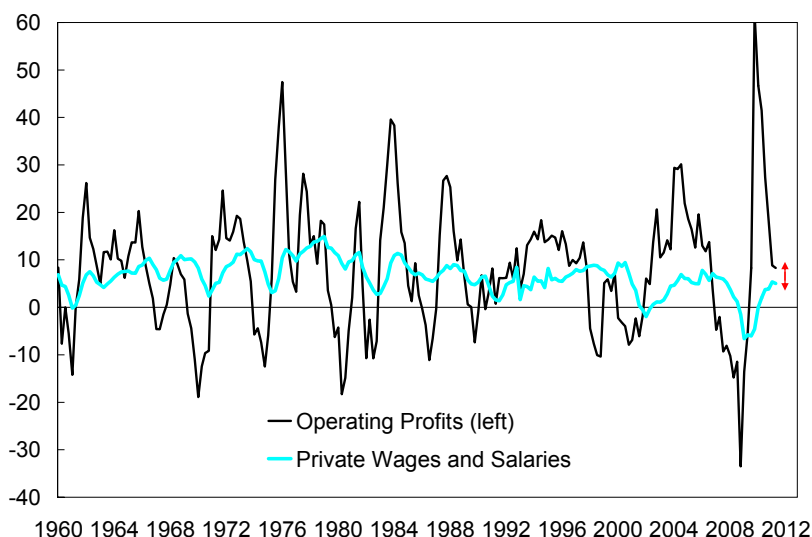
As we've noted previously, the fiscal outlook is a wild card going forward with the potential to single-handedly determine the U.S. outlook (please see "U.S. Budget, Just One More Chance to Get it Right," August 8, 2011). The outlook for 2013, in particular, could range from a deliberate act to forestall significant fiscal tightening, to roughly \$500 billion in combined tax increases and spending cuts. Our sitting forecasts assume relatively mild, spending-led fiscal tightening. If so, the U.S. budget deficit should shrink very gradually and incompletely, and not be entirely decisive for the economic outlook or outright depressing for profit levels.

For example, the 1.5% drop in total government consumption and investment outlays we expect for 2012, combined with stable tax rates and a mild growth-driven rise in tax payments, reduces the Federal deficit to \$1 trillion in 2012 from \$1.3 trillion in 2011. Net of this fiscal contraction, we still expect real GDP to grow 2%-2 1/2%. But without a fiscal driver of added demand, incremental gains in revenues would likely come at *lower* profit margins. As noted, a gradual fading in profitability is coming into view in both the firm-level data, and national accounts data (see figure 14).

Fiscal path is highly unpredictable but key to the outlook for the economy and profits.

To whatever extent the U.S. economy grows, the absence of a fiscal driver would mean that expansion must be driven by private activity, with wages and capital investment costs for firms recycled into spending and profits of others. While not our forecast given the sharp adjustments in private activity in the past few years, we would note that sharp renewed cost cutting – which might seem likely to boost or maintain individual firm margins – would fail to maintain aggregate margins when recovery reaches the present stage.

Figure 14. National Corporate Operating Profits and Private Wage Payments Y/Y%



Source: BEA

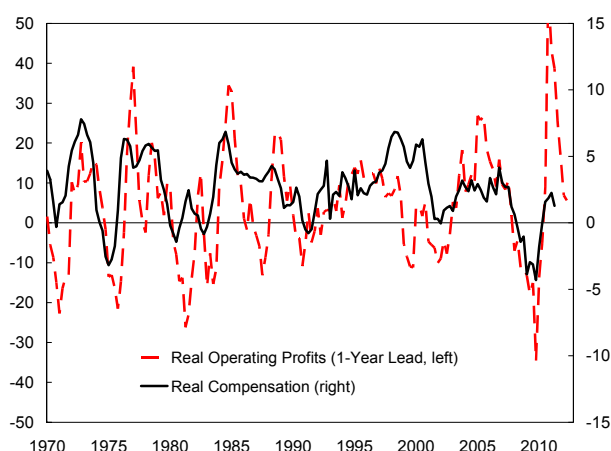
Looking ahead, we could consider a scenario in which fiscal tightening is significantly forestalled again, or a low probability scenario in which it is credibly back-loaded and concentrated in rationalizing long-term entitlement costs in a way that *strengthens* the current expansion. In a significantly stronger growth scenario, profits tend to rise more rapidly than wages for long periods, only falling back sharply during inevitable recessions (see left and right scales of figure 15).

While many have been skeptical that corporate earnings will grow at all in 2012, we see some two-sided risk to our now downwardly revised earnings estimates. But with that said, recent revisions to GDP and profits data have tended to raise our estimates of the extraordinary positive impact of fiscal easing on profits, making it appear closer to a positive effect of 20% of the current profit level, rather than the 10%-15% we have estimated previously (Please see figure 16 and our report "The Strategic Income Reserve," March 21, 2011).

GDP Revisions suggest even stronger fiscal influence on profits than before.

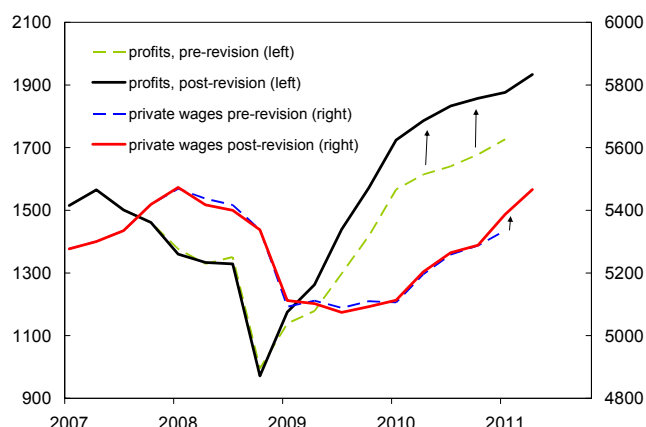
The fiscal easing of the past cycle will make it much more difficult to provide profit-friendly counter-cyclical macro policies in the future. While we don't believe a future recession need be nearly as severe as 2008-2009 - particularly with a far less leveraged financial system - the absence of a fiscal cushion and high profit margins now make it likely that a future recession will entail a deep decline in profits.

Figure 15. Real Corporate Profits (1-Year Lead) vs Real Employee Compensation Y/Y%



Sources: BEA

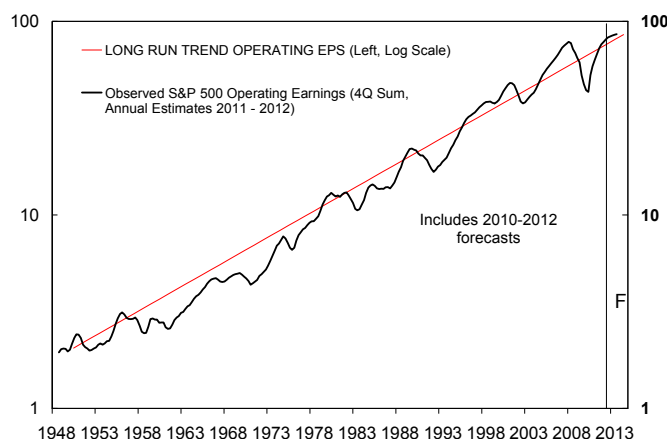
Figure 16. Corporate Profits and Private Industry Wages, Billions of \$ SAAR, Pre-2011 Revisions, Post-2011 Revisions



Sources: BEA

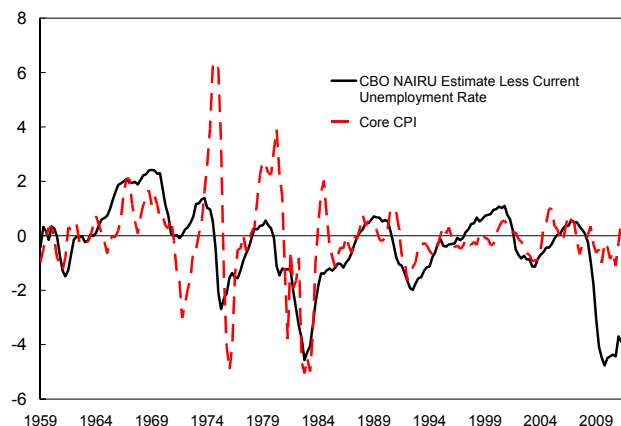
As a last piece of evidence that profits have risen as a result of fiscal easing, we would note that our S&P 500 EPS levels have just eclipsed levels we would predict at the middle of an economic expansion, with relatively full employment. The behavior of inflation is also tracking such a mid cycle demand level (see figures 17-18). At the same time, labor market slack remains profound, with employment still about 7 million short of peak 2007 levels.

Figure 17. Index of S&P Operating EPS (4-Q Sums) and Estimated Trend Level, Log Scale



Source: S&P, Thomson Financial, Citi Investment Research and Analysis

Figure 18. Change in CPI Core Rate (1-Year Difference in Y/Y%) vs CBO Estimate of Full Employment Less Observed UR



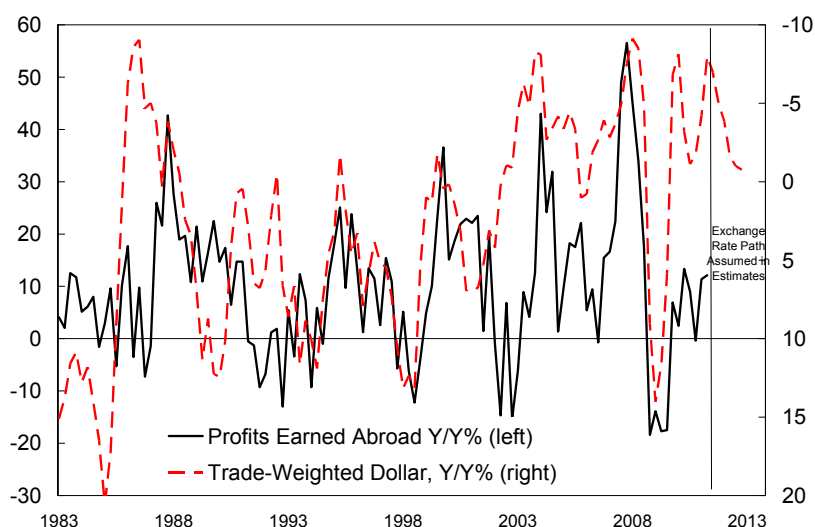
Sources: CBO, BLS

More Views on Forecast Risks

In considering risks to the new earnings forecast, we've focused a good deal on differences in drivers of nationally-measured profits and the outlook for S&P 500 firms. For example, to whatever extent exchange rate developments affect the U.S., this is already included in the economic forecast, as well as our models of S&P 500 earnings. However, the recent period of surprisingly *weak* growth in profits earned abroad might present some upside risk to our views on mean reversion (see figure 19).

Some two-sided risks, but S&P 500 EPS is not likely to sharply part ways with national profits trend.

Figure 19. U.S. Profits Earned Abroad and Trade-Weighted Dollar, Y/Y%



Source: BEA, FRB, Citi Investment Research and Analysis

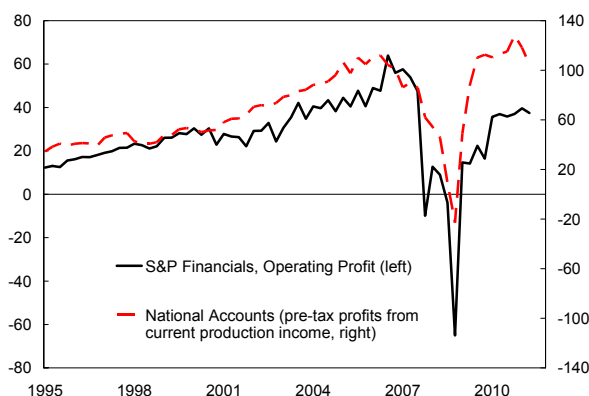
However, the current period seems unlikely to be one in which S&P 500 firms see a remarkably different trend from nationally-measured corporate profits. As figures 20-23 show, the largest difference between profit trends in the national accounts

data and the S&P 500 has been the financial sector, where national data account for profits solely from current production income. Asset valuation changes, and more importantly, bad debts - the product of past lending mistakes - are purposely excluded in the national accounts. Consensus estimates showing a 20% gain in Financial sector EPS in 2012 appear to imply further declines in credit losses, too robust in our view in light of the slow economic growth we assume and a stable to slightly higher unemployment rate (see appendix 1).

Large divergence in our estimates from consensus in Energy and Financials.

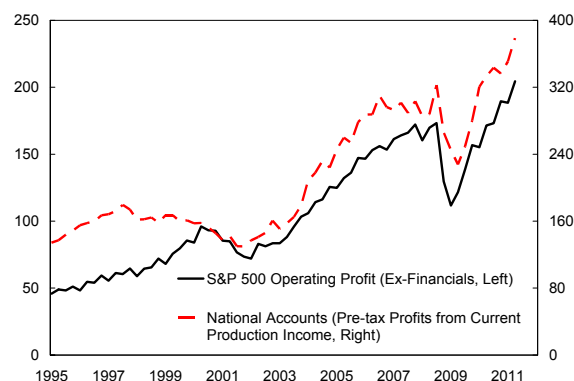
We don't forecast a U.S. recession for reasons we've discussed at length previously. But even without this assumption, folding in likely downward revisions to 2H 2011 earnings results and 2012 estimates, the sharply slower earnings growth we expect relative to "bottom up" projections is a difference of about 20% for the cyclical sectors including Energy, Materials, Consumer Discretionary, IT and Industrials. In the event of full blown new recession, our earnings estimate for 2012 for the overall S&P 500 would be close to \$80 per share or somewhat lower. In that event, our estimates for the most growth-sensitive sectors would likely be half of the current consensus earnings level.

Figure 20. U.S. Financial "Economic Profits" and S&P 500 Financial Sector Operating Profits, Billions of \$



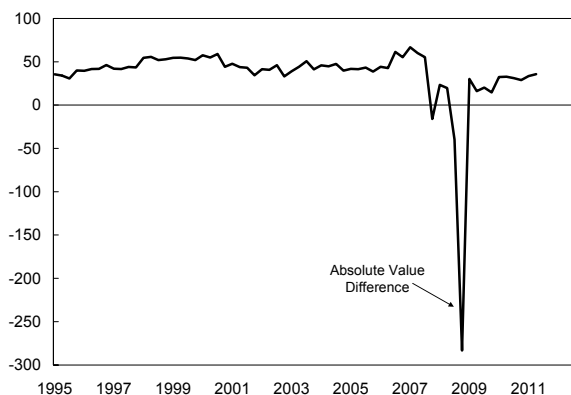
Sources: Bureau of Economic Analysis, Standard and Poor's, Thomson Reuters, and Citi Investment Research and Analysis. Note: S&P Financials operating profits excludes BAC loss in 2Q11.

Figure 21. U.S. Non-financial "Economic Profits" and S&P 500 Operating Profits (Excluding Financials), Billions of \$



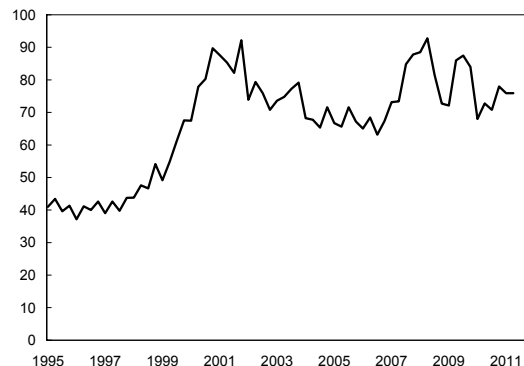
Sources: Bureau of Economic Analysis, Standard and Poor's, Thomson Reuters, and Citi Investment Research and Analysis.

Figure 22. S&P 500 Financial Sector Operating Profits (NSA) as % of National Financial Operating Profits (NIA data)



Sources: BEA, S&P, Thomson Financial

Figure 23. S&P 500 Non-Financial Operating Profits (NSA) as % of National Corporate Operating Profits



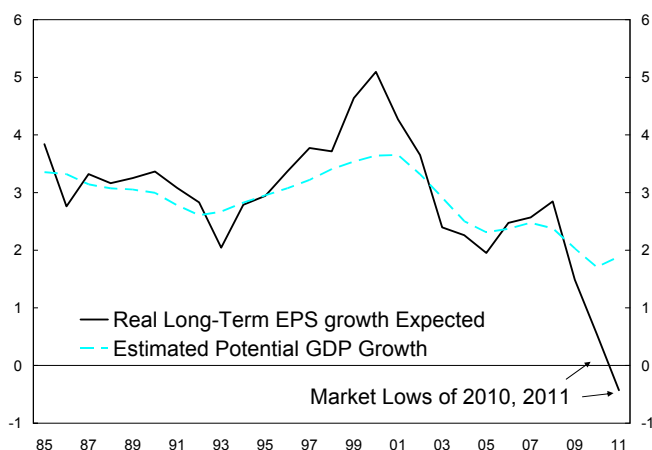
Sources: BEA, S&P, Thomson Financial

While very different than the consensus of aggregated firm-level forecasts (bottom up consensus) It is not clear at all, in our view, that our *baseline* forecast presents a more bearish view of profits than markets now expect. As we write, earnings in the first half 2011 have risen 16%, while the S&P 500 has fallen 6%. Absolute corporate borrowing costs for investment grade firms and many high yield issuers have fallen, and most strikingly, investors are willing to accept a near-zero real yield for 10 years in TIPS market. Our own estimates of the real long-term earnings growth rate required to satisfy current share price levels (assuming the current cost of private debt capital), is now a slightly *negative* number (see figures 24-25).

Markets seem to price real declines in trend earnings.

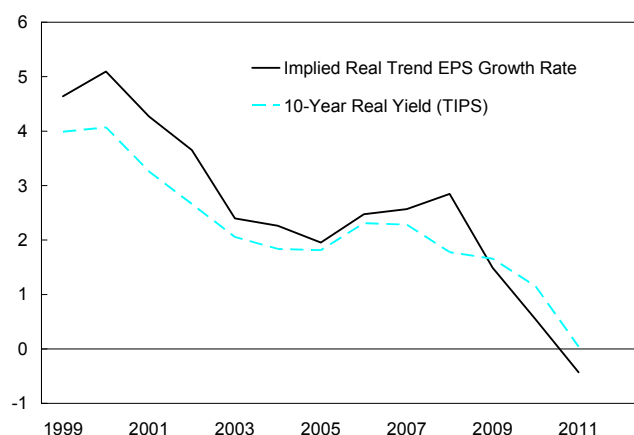
Such a low trend growth estimate is a remarkable shift down from the long-term growth rates assumed at the top of the secular bull market in 2000 when investors appeared to price an eternity of rapid profits growth.

Figure 24. CBO Estimate of Potential Real GDP Growth and Estimated Long-Term Real EPS Growth Rate in S&P 500 Level



Sources: CBO, S&P, Thomson Financial, Citi Investment Research and Analysis.
Note: Last two data points for expected real EPS are low points of 2010, 2011-to-date.

Figure 25. TIPS Real 10-Year Yield and Estimated Long-Term Real EPS Growth Rate in S&P 500 Level



Sources: Federal Reserve Board, S&P, Thomson Financial, Citi Investment Research and Analysis. Last data points are current.

Sector Valuation Data, Estimates

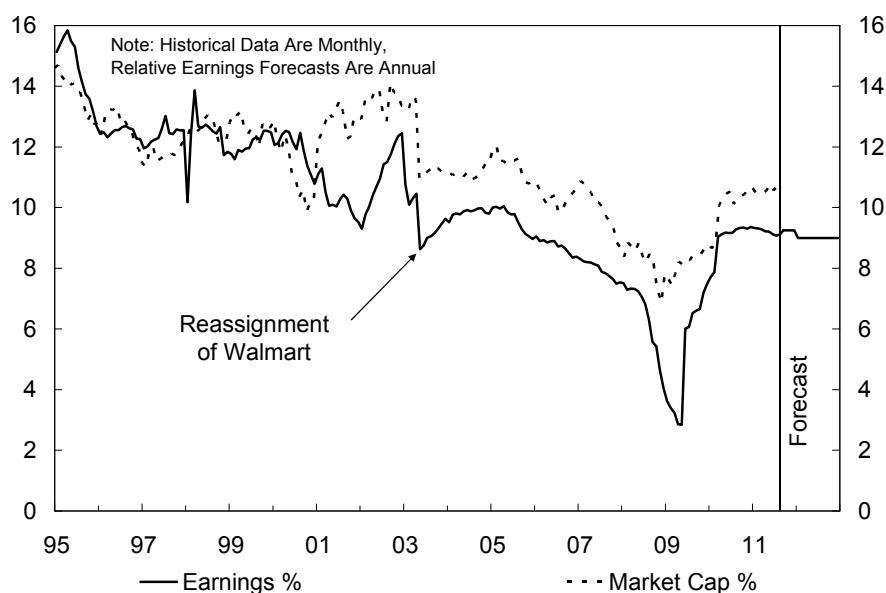
As noted, our industry sector earnings estimates have been updated and refreshed to reflect 2Q11 EPS results and changes made to the 2011 economic outlook.

Figure 26. S&P 500 Sector Earnings and Market Cap as Percent of Total

	Citigroup Estimated Sector Earnings Share of Total S&P (%)					Change in Earnings Share (Pct Pts)				Market Cap %	PE Multiples			
Sector	2008	2009	2010	2011	2012	2009	2010	2011	2012	Aug '11	2009	2010	2011	2012
S&P 500												14.6	12.4	11.8
Consumer Discretionary	5.4	8.4	9.0	9.3	9.0	3.0	0.6	0.3	(0.3)	10.7	19.9	17.2	14.3	14.0
Consumer Staples	13.3	13.3	10.2	9.6	9.6	0.1	(3.1)	(0.7)	0.0	11.4	14.9	15.1	14.8	14.1
Energy	25.9	10.9	11.9	13.4	13.4	(15.0)	1.0	1.5	0.0	12.4	18.4	14.7	11.4	10.9
Financials	(8.3)	11.9	18.5	17.8	17.9	20.2	6.6	(0.8)	0.2	14.1	21.1	12.6	9.9	9.3
Health Care	17.7	17.9	14.5	13.8	13.8	0.2	(3.4)	(0.7)	0.0	11.8	12.3	10.9	10.6	10.1
Industrials	15.2	10.5	9.7	9.9	10.1	(4.7)	(0.8)	0.2	0.2	10.5	17.0	16.4	13.1	12.3
IT	17.4	16.5	17.0	17.2	17.4	(0.9)	0.6	0.2	0.2	18.7	21.1	15.9	13.5	12.7
Materials	4.3	2.0	2.7	3.3	2.9	(2.2)	0.7	0.5	(0.3)	3.6	30.7	19.9	13.5	14.4
Telecom Services	4.6	3.8	2.7	2.5	2.6	(0.8)	(1.2)	(0.2)	0.1	3.1	14.4	17.0	15.7	14.6
Utilities	4.6	4.7	3.6	3.3	3.3	0.1	(1.1)	(0.3)	(0.0)	3.7	13.7	13.3	13.8	13.3

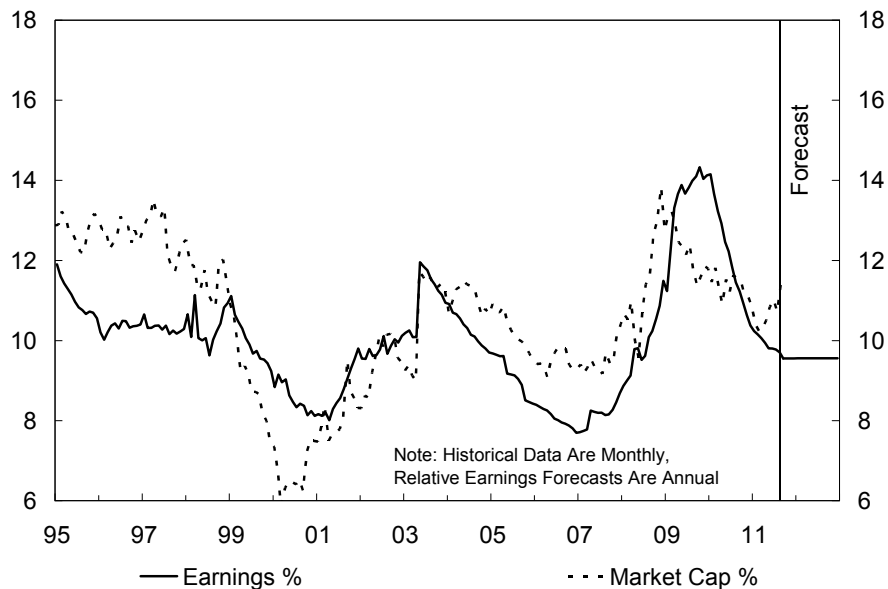
Source: Citi Investment Research and Analysis

Figure 27. Consumer Discretionary Sector Market Cap & Earnings as % of S&P Total



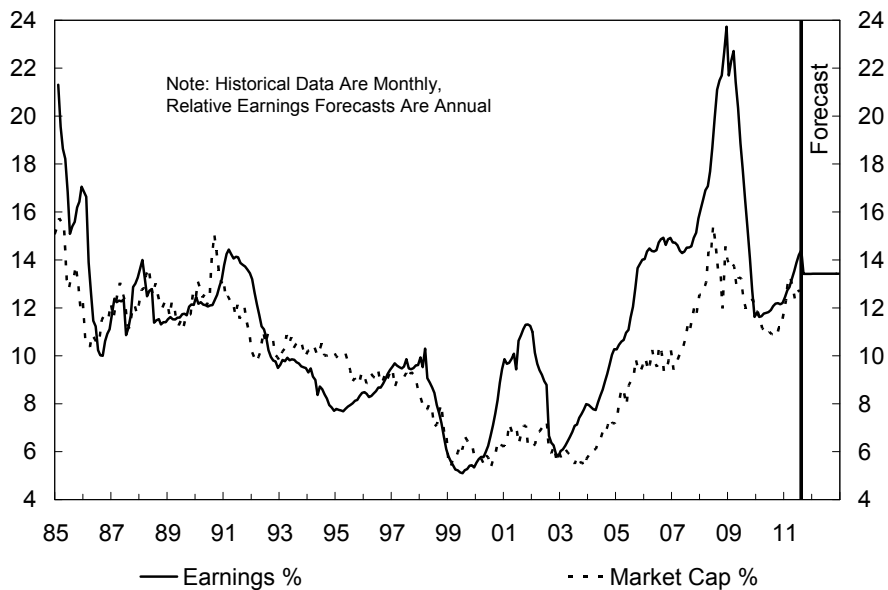
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 28. Consumer Staples Sector Market Cap & Earnings as % of S&P Total



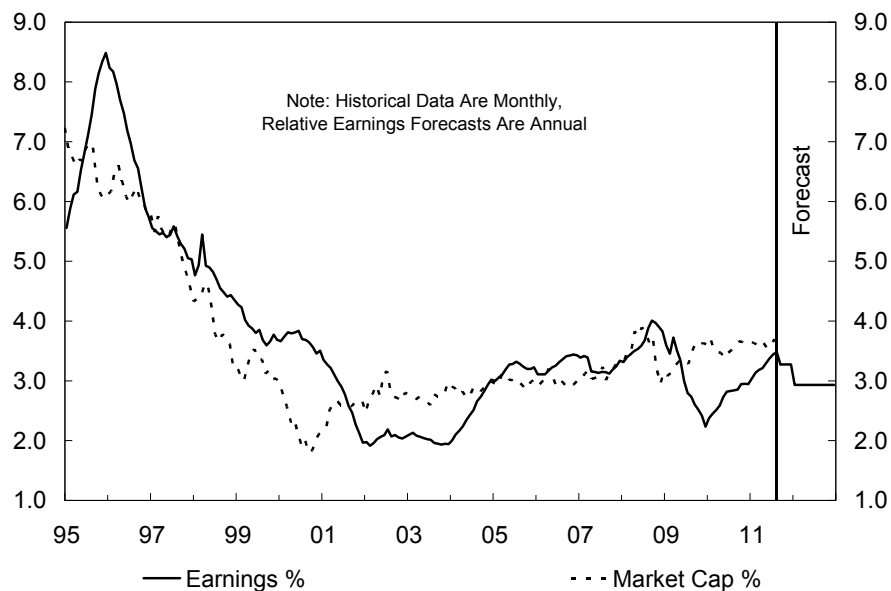
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 29. Energy Sector Market Cap & Earnings as % of S&P Total



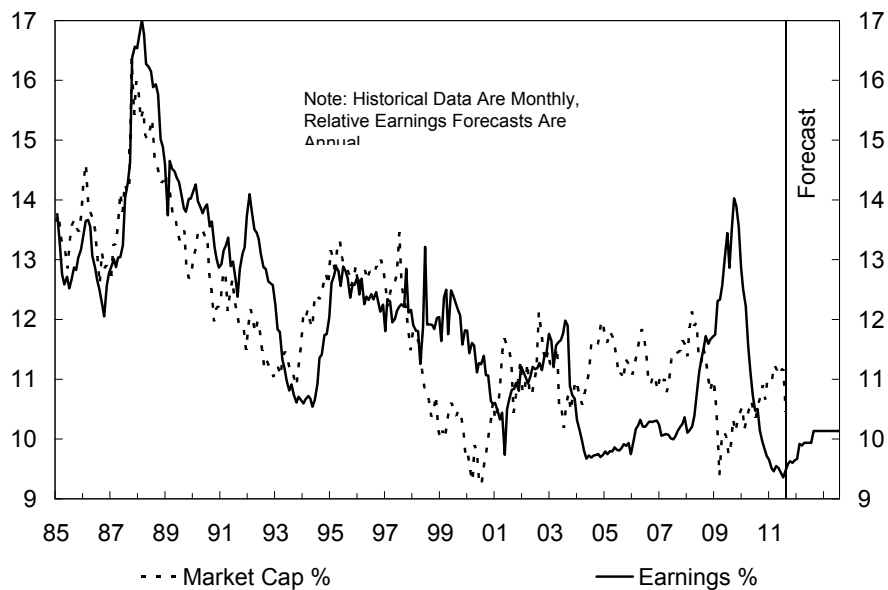
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 30. Materials Sector Market Cap & Earnings as % of S&P Total



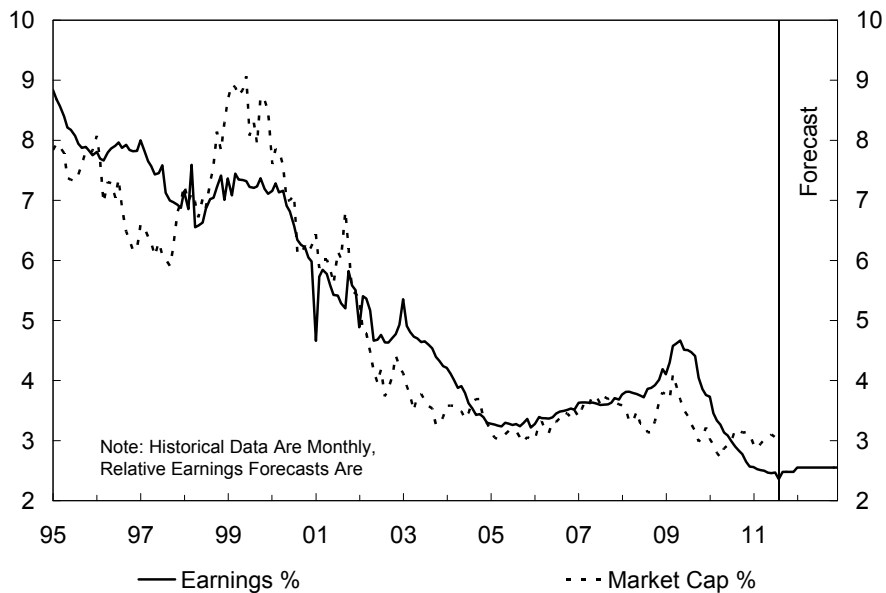
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 31. Industrials Sector Market Cap & Earnings as % of S&P Total



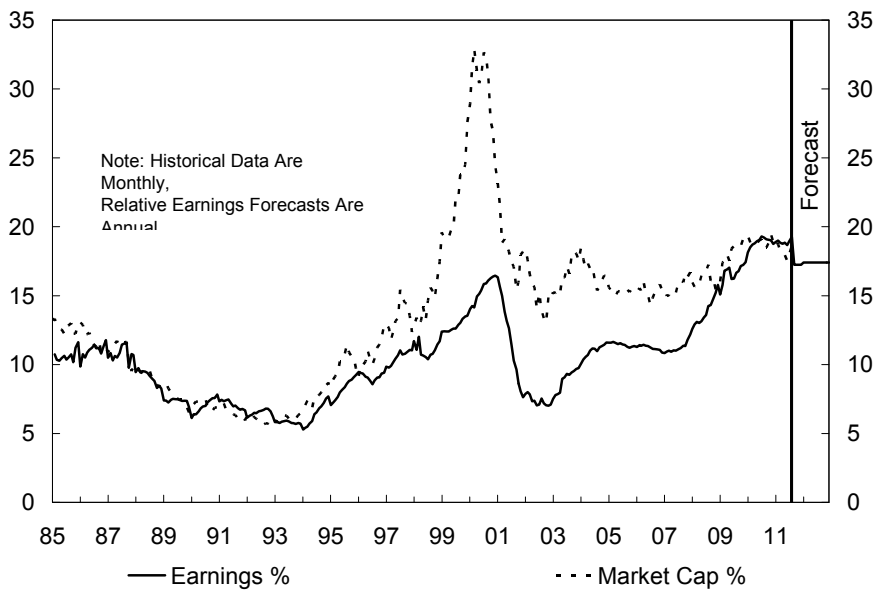
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 32. Telecom Services Sector Market Cap & Earnings as % of S&P Total



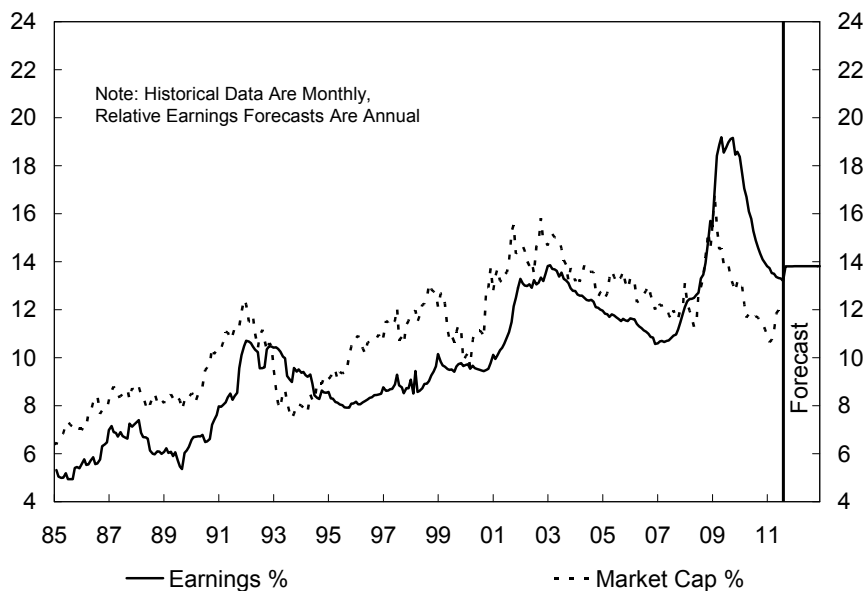
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 33. IT Sector Market Cap & Earnings as % of S&P Total



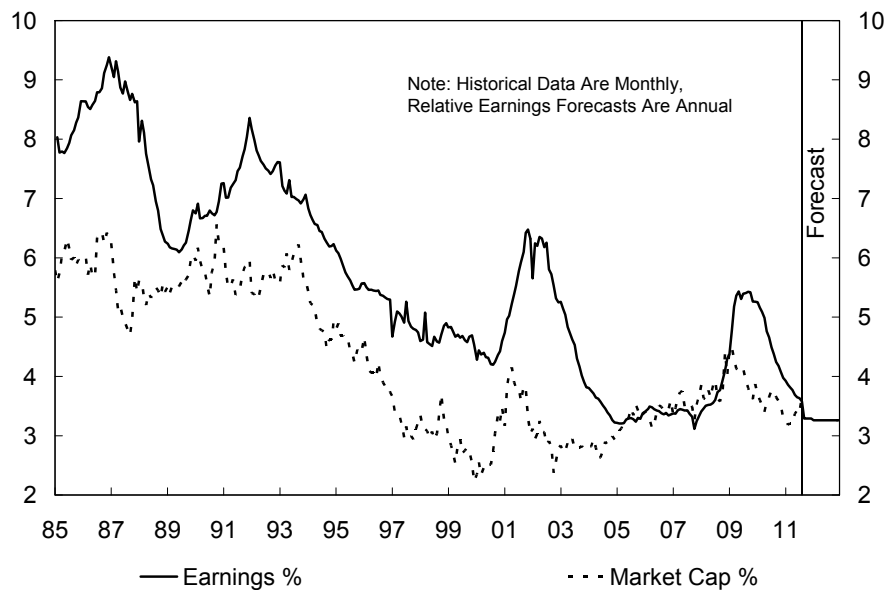
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 34. Healthcare Sector Market Cap & Earnings as % of S&P Total



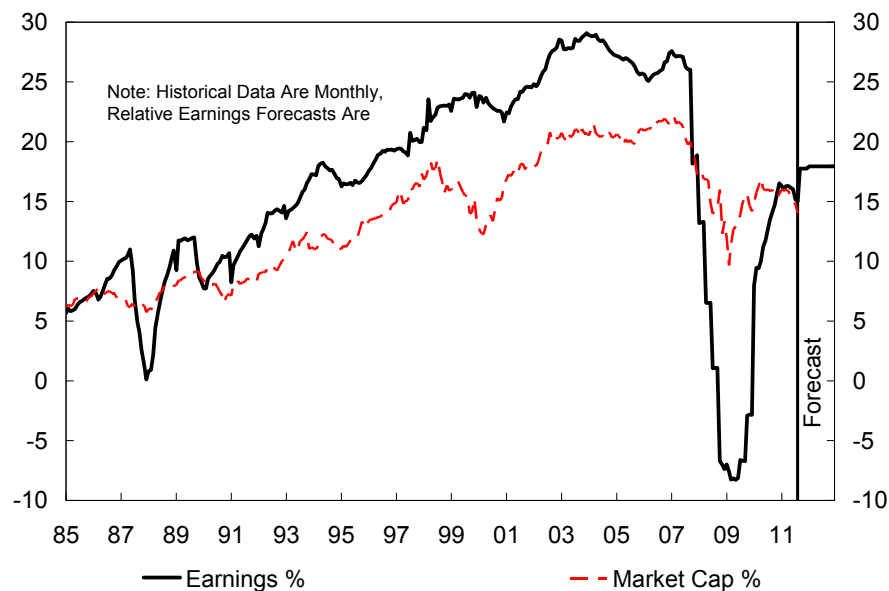
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 35. Utilities Sector Market Cap & Earnings as % of S&P Total



Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

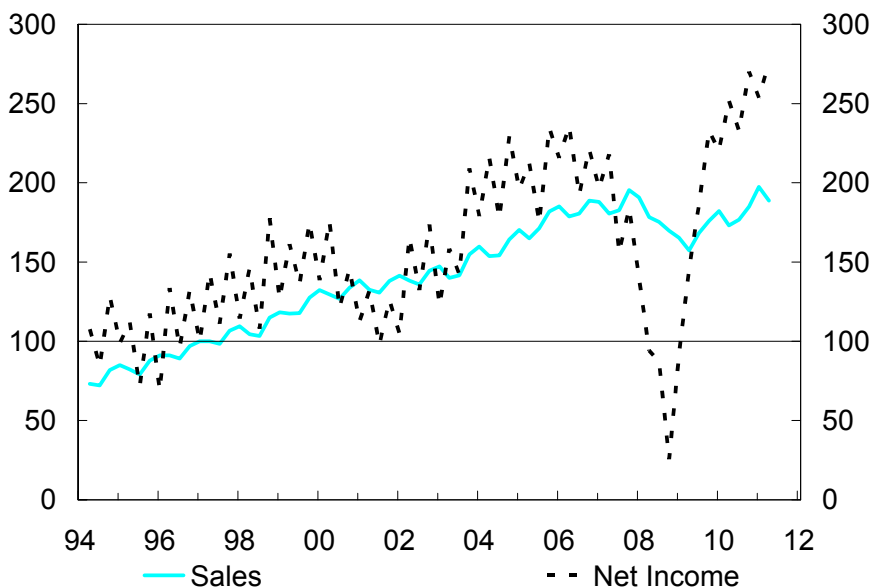
Figure 36. Financial Sector Market Cap & Earnings as % of S&P Total



Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

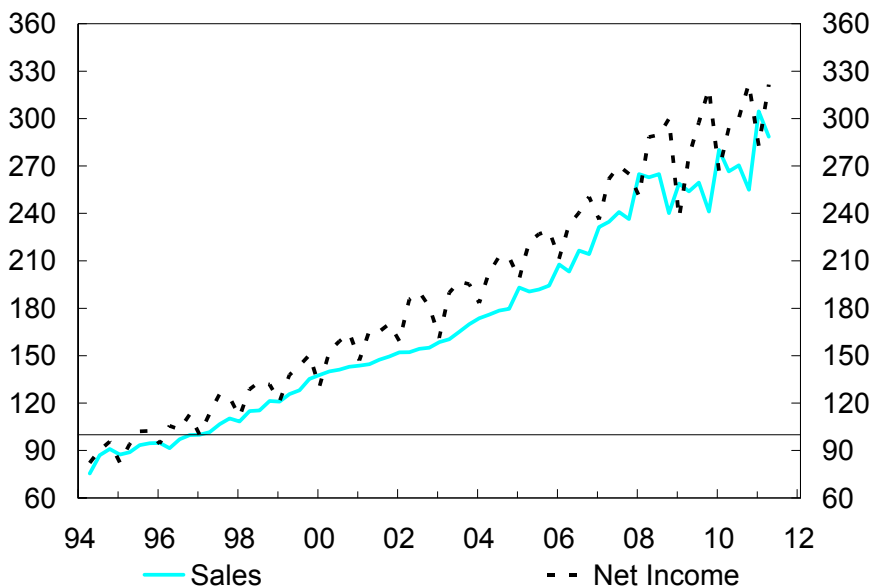
Sector Revenue and EPS Indices

Figure 37. S&P Consumer Discretionary Sector Operating EPS and Revenue Indices 1Q 1997=100



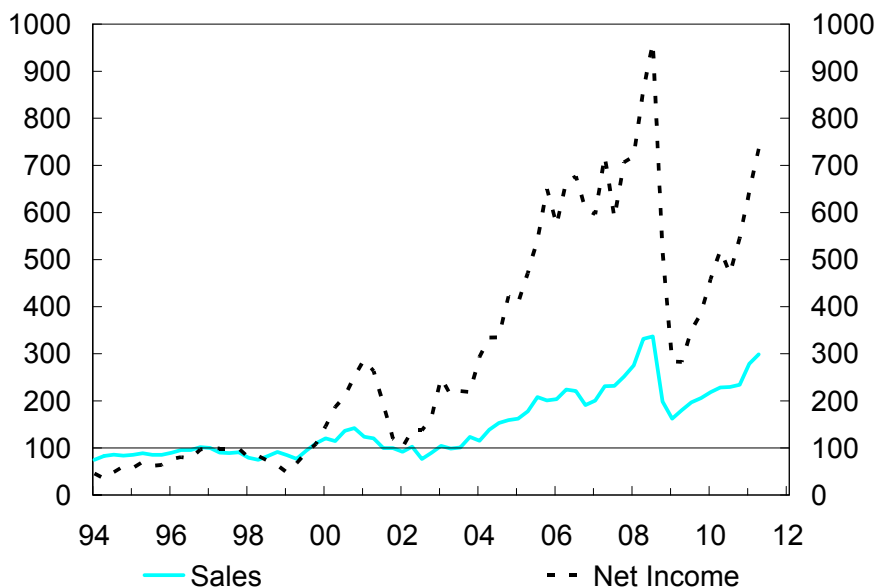
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 38. S&P Consumer Staples Sector Operating EPS and Revenue Indices 1Q 1997=100



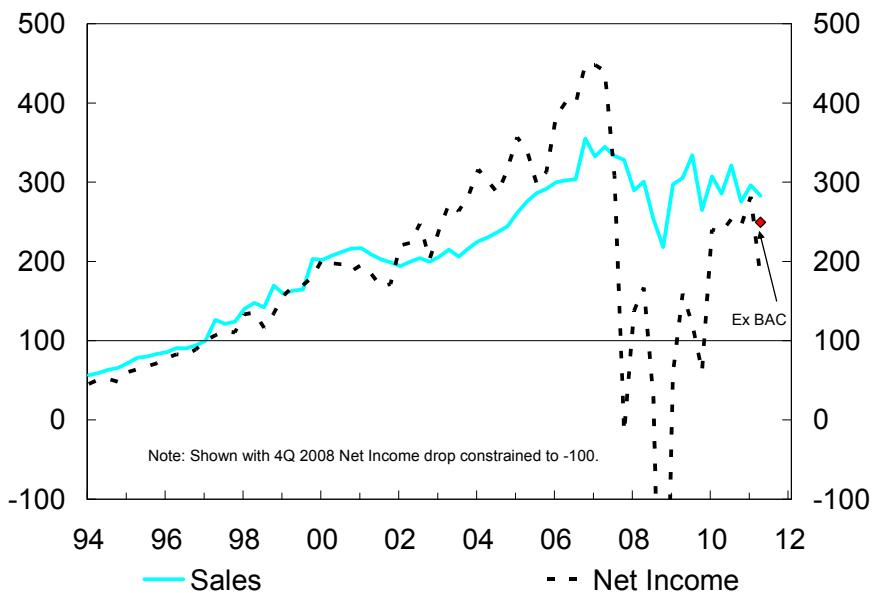
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 39. S&P Energy Sector Operating EPS and Revenue Indices 1Q 1997=100



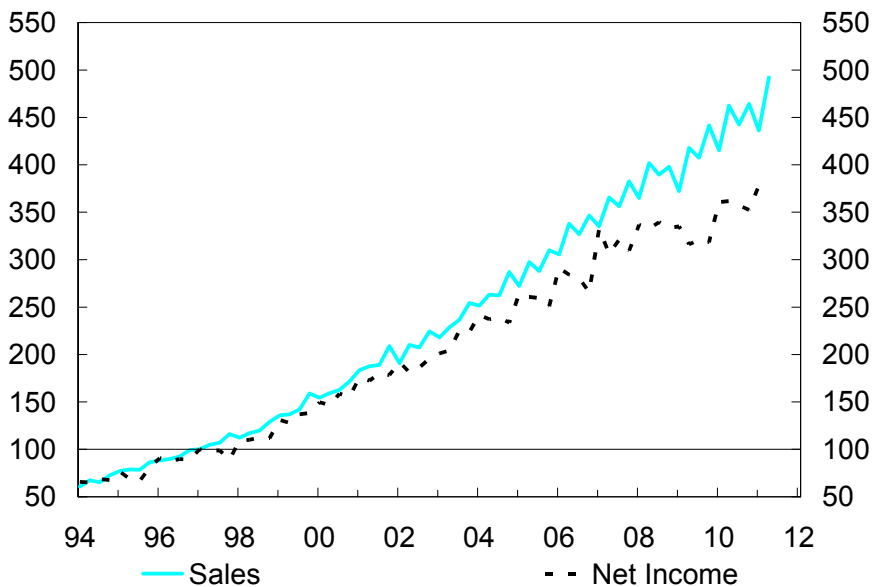
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 40. S&P Financials Sector Operating EPS and Revenue Indices 1Q 1997=100



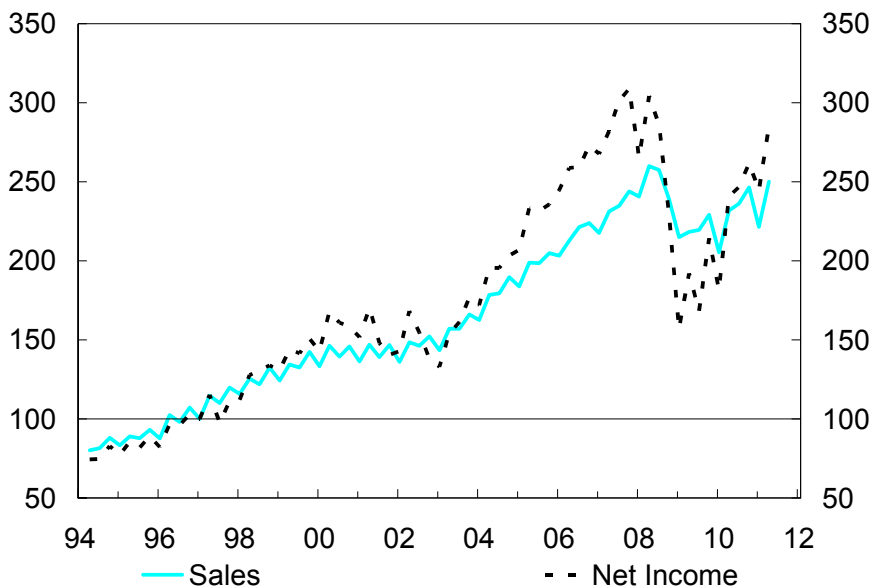
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 41. S&P Healthcare Sector Operating EPS and Revenue Indices 1Q 1997=100



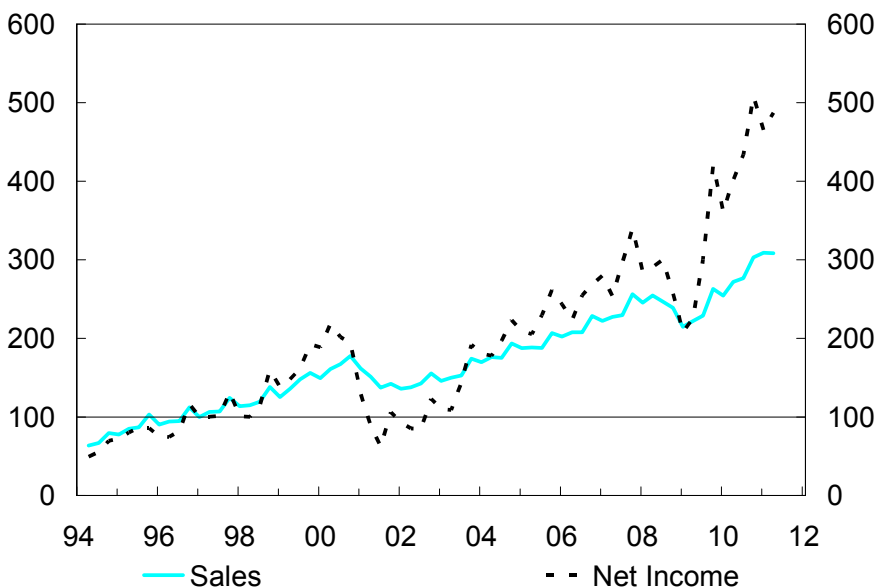
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 42. S&P Industrial Sector Operating EPS and Revenue Indices 1Q 1997=100



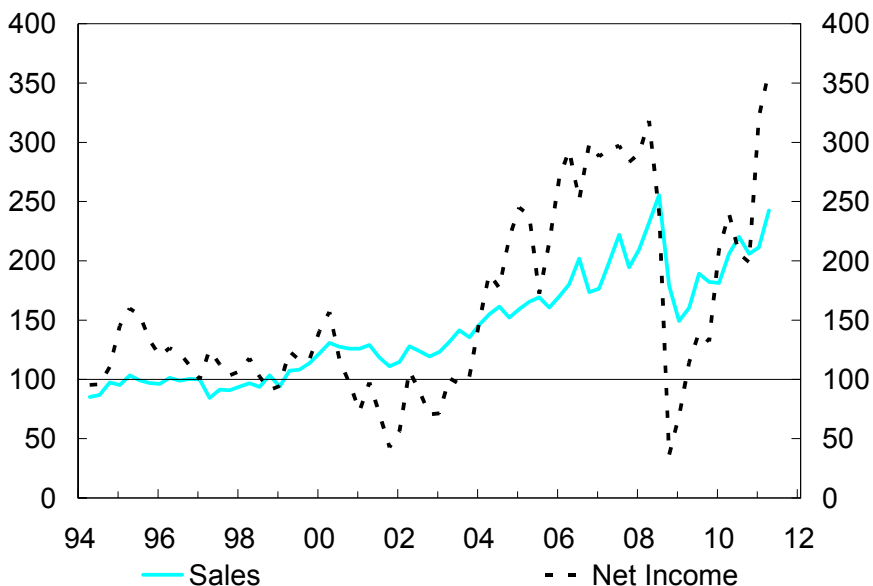
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 43. S&P IT Sector Operating EPS and Revenue Indices 1Q 1997=100



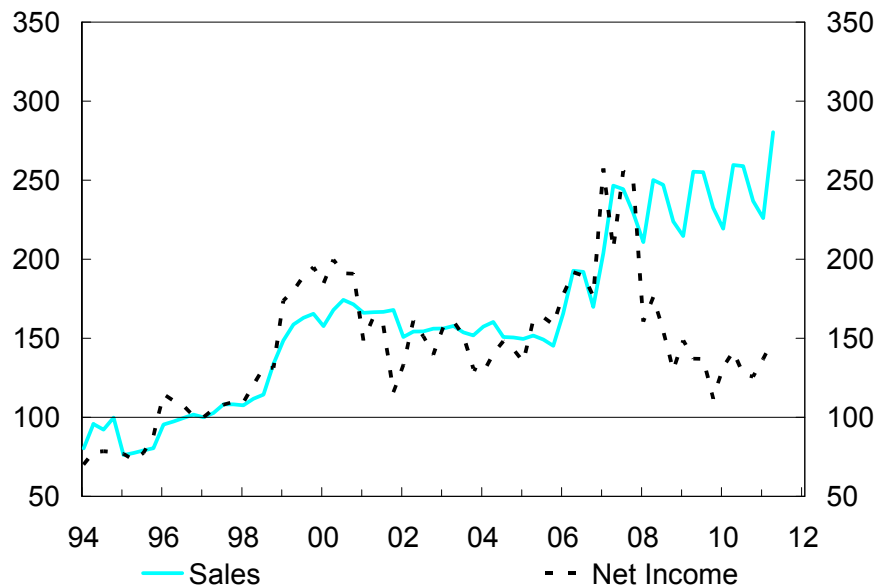
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 44. S&P Materials Sector Operating EPS and Revenue Indices 1Q 1997=100



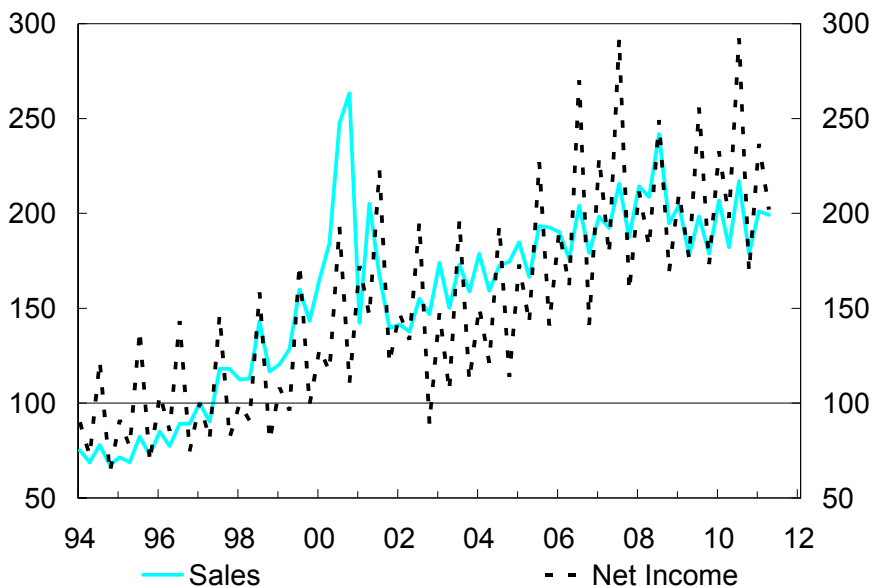
Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

Figure 45. S&P Telecom Services Sector Operating EPS and Revenue Indices 1Q 1997=100



Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

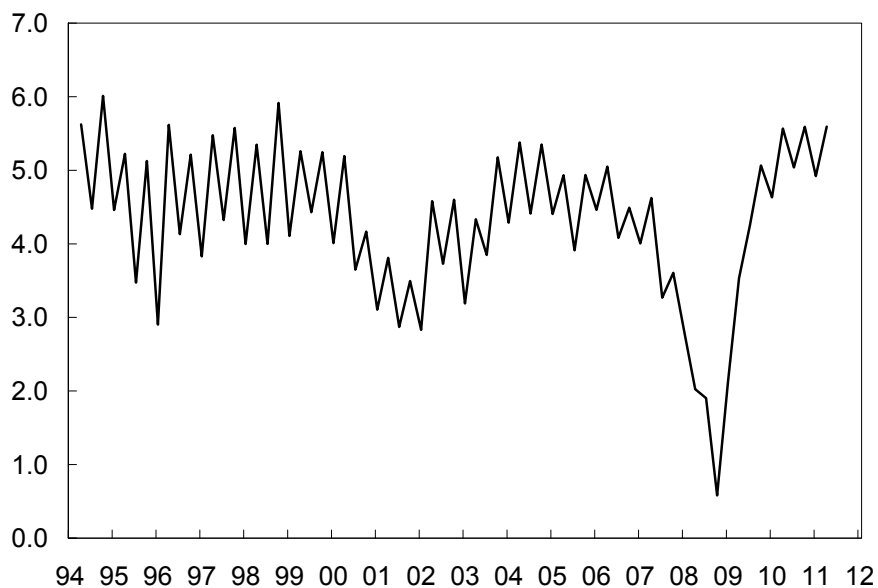
Figure 46. S&P Utility Sector Operating EPS and Revenue Indices 1Q 1997=100



Sources: S&P, Thomson Financial, Factset, and Citi Investment Research and Analysis.

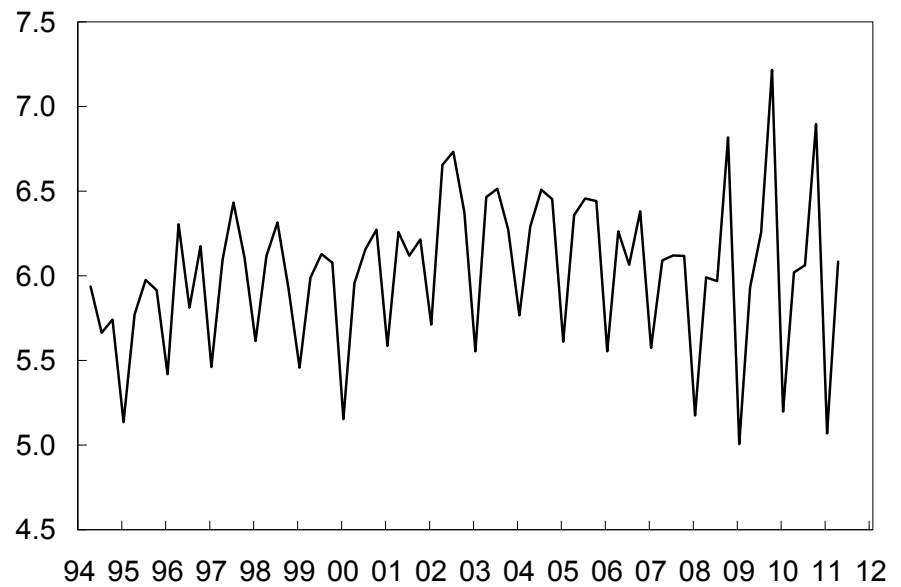
Sector Margins

Figure 47. S&P Consumer Discretionary Sector Margin (Operating Profit as % of Sales)



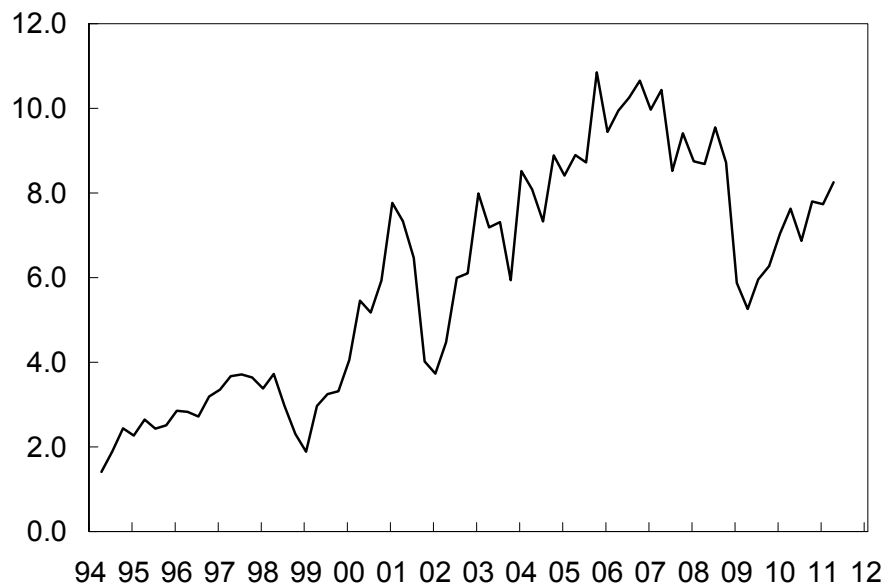
Sources: Factset and Citi Investment Research and Analysis.

Figure 48. S&P Consumer Staples Sector Margin (Operating Profit as % of Sales)



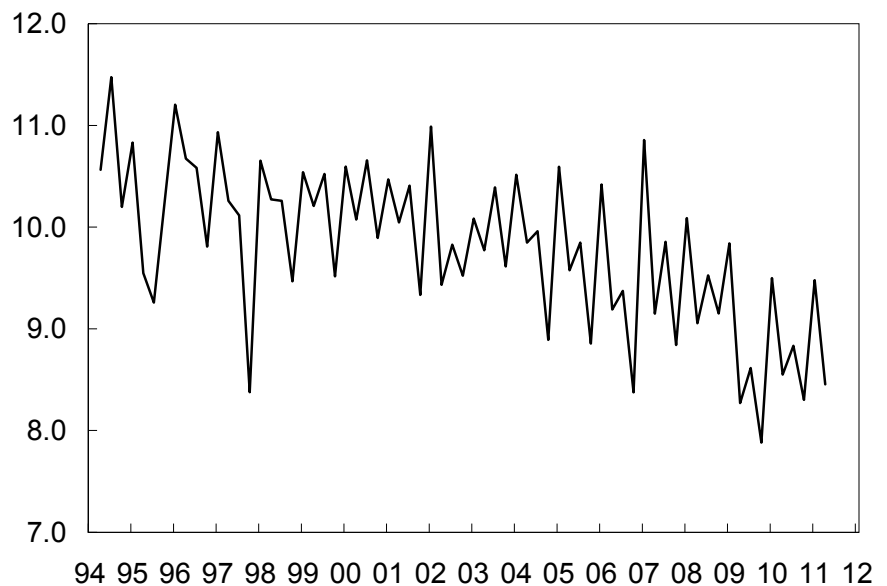
Sources: Factset and Citi Investment Research and Analysis.

Figure 49. S&P Energy Sector Margin (Operating Profit as % of Sales)



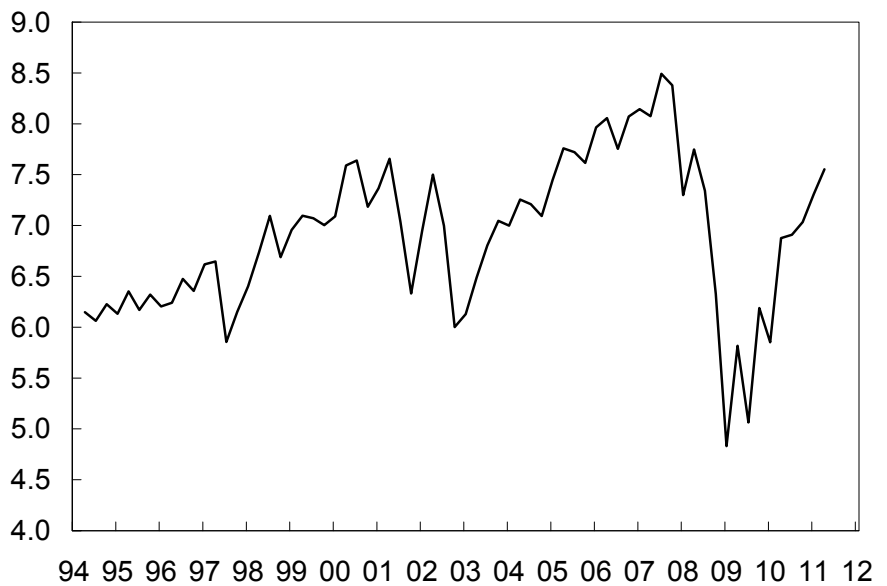
Sources: Factset and Citi Investment Research and Analysis.

Figure 50. S&P Healthcare Sector Margin (Operating Profit as % of Sales)



Sources: Factset and Citi Investment Research and Analysis.

Figure 51. S&P Industrials Sector Margin (Operating Profit as % of Sales)



Sources: Factset and Citi Investment Research and Analysis.

Figure 52. S&P Information Technology Sector Margin (Operating Profit as % of Sales)



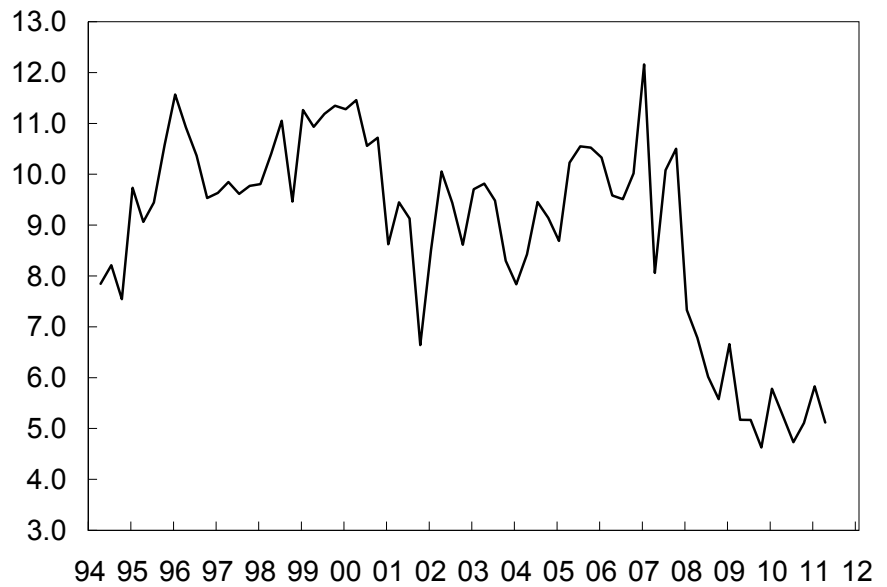
Sources: Factset and Citi Investment Research and Analysis.

Figure 53. S&P Materials Sector Margin (Operating Profit as % of Sales)



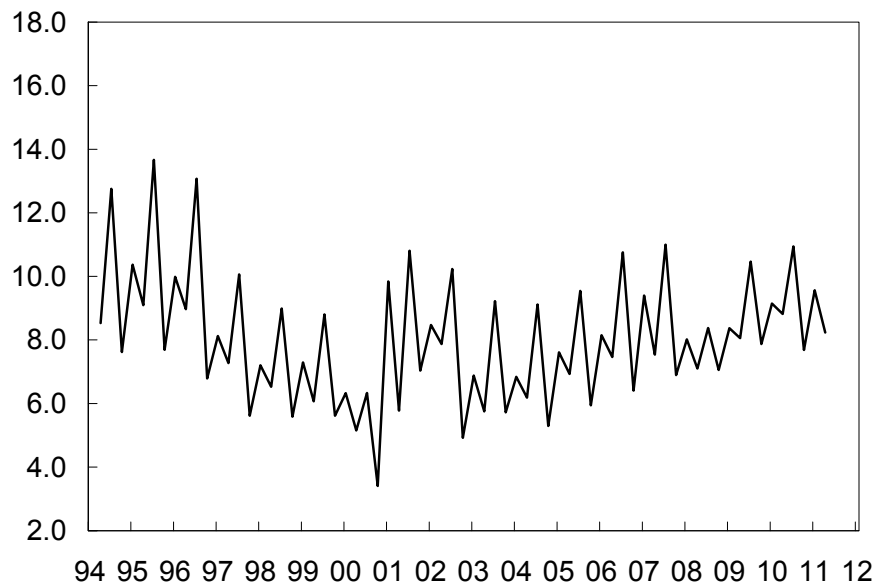
Sources: Factset and Citi Investment Research and Analysis.

Figure 54. S&P Telecom Services Sector Margin (Operating Profit as % of Sales)



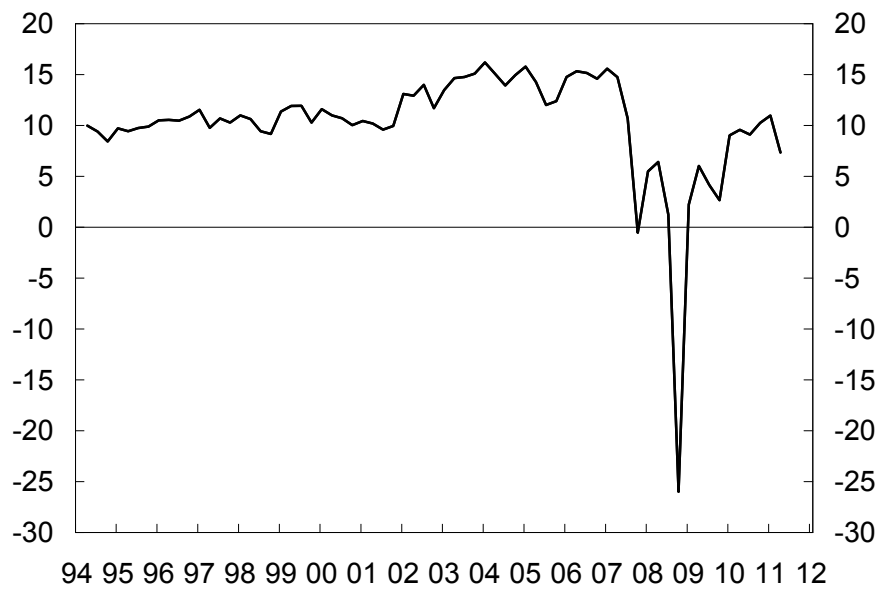
Sources: Factset and Citi Investment Research and Analysis.

Figure 55. S&P Utilities Sector Margin (Operating Profit as % of Sales)



Sources: Factset and Citi Investment Research and Analysis.

Figure 56. S&P Financials Sector Margin (Operating Profit as % of Sales)



Sources: Factset and Citi Investment Research and Analysis.

Appendix 1

Citigroup Forecast	Last Update: August 24, 2011														
	Percent Change from Preceding Quarter at Annual Rate or Percent Change from Year-Ago Quarter														
	History				Forecast								Hist	Forecast	
	2010.1	2010.2	2010.3	2010.4	2011.1	2011.2	2011.3	2011.4	2012.1	2012.2	2012.3	2012.4	2010	2011	2012
Real GDP (Q/Q)	3.9	3.8	2.5	2.3	0.4	0.9	1.6	1.8	2.1	2.5	2.8	2.7			
—Y/Y % Change	2.2	3.3	3.5	3.1	2.2	1.5	1.3	1.2	1.6	2.0	2.3	2.5	3.0	1.6	2.1
—4Q/4Q % Change													3.1	1.2	2.5
Personal Consumption Expenditures (Q/Q)	2.7	2.9	2.6	3.6	2.1	0.2	1.8	2.3	2.3	2.3	2.8	2.5			
—Y/Y % Change	0.9	2.1	2.2	3.0	2.8	2.1	1.9	1.6	1.6	2.2	2.4	2.5	2.0	2.1	2.2
Durable Goods	9.9	7.8	8.8	17.2	11.8	(4.4)	3.7	10.2	6.5	4.5	5.3	4.3	7.2	7.7	5.4
Nondurable Goods	4.8	1.9	3.0	4.3	1.6	0.1	1.9	1.4	1.4	2.3	2.1	2.2	2.9	2.0	1.7
Services	1.0	2.5	1.6	1.3	0.8	0.8	1.5	1.3	2.0	1.9	2.6	2.3	0.9	1.2	1.8
Nonresidential Fixed Investment (Q/Q)	6.0	18.6	11.3	8.7	2.1	6.3	3.2	3.9	4.0	4.8	7.7	6.0			
—Y/Y % Change	(4.5)	4.0	7.7	11.1	10.0	7.1	5.0	3.9	4.3	4.0	5.1	5.6	4.4	6.4	4.8
Structures (Q/Q)	(24.7)	7.4	4.2	10.6	(14.4)	8.2	0.4	0.3	0.7	1.2	1.9	2.8			
—Y/Y % Change	(27.4)	(18.2)	(12.6)	(1.8)	1.5	1.7	0.7	(1.7)	2.4	0.7	1.0	1.7	(15.8)	0.5	1.4
Equipment & Software (Q/Q)	21.7	23.2	14.2	8.0	8.7	5.7	4.2	5.2	5.1	6.0	9.8	7.1			
—Y/Y % Change	8.5	15.5	17.6	16.6	13.4	9.1	6.6	5.9	5.0	5.1	6.5	7.0	14.6	8.6	5.9
Residential Fixed Investment (Q/Q)	(15.3)	22.8	(27.7)	2.5	(2.4)	12.3	1.4	3.7	4.0	7.3	13.1	16.8			
—Y/Y % Change	(6.8)	4.2	(7.8)	(6.3)	(2.9)	(5.1)	3.3	3.6	5.3	4.1	7.0	10.2	(4.3)	(0.4)	6.6
Change in Private Inventories (\$bln)	39.9	64.6	92.3	38.3	49.1	49.6	40.6	39.5	44.4	56.1	49.9	48.9	58.8	44.7	49.8
—contribution to GDP	3.1	0.8	0.9	(1.8)	0.3	(0.1)	(0.3)	0.0	0.1	0.3	(0.2)	0.0	1.6	0.0	0.1
Net Exports (\$bln)													(422)	(403)	(371)
—contribution to GDP	(1.0)	(1.9)	(0.7)	1.4	(0.3)	0.2	0.4	0.0	0.1	0.3	0.3	0.3	(0.5)	0.1	0.2
Exports (Q/Q)	7.3	10.0	10.0	7.8	7.9	3.5	6.1	7.7	8.6	8.1	7.6	7.6	11.3	7.2	7.5
Imports (Q/Q)	12.6	21.6	12.3	(2.3)	8.3	1.8	2.3	6.0	6.2	4.9	4.6	4.6	12.5	5.3	4.9
Gov't Consumption & Investment (Q/Q)	(1.2)	3.7	1.0	(2.8)	(5.9)	(0.8)	(1.4)	(1.2)	(1.7)	(1.9)	(1.7)	(1.5)	0.7	(2.1)	(1.5)
Federal	2.8	8.8	3.1	(3.0)	(9.4)	2.2	(1.5)	(0.8)	(2.6)	(3.8)	(3.2)	(3.0)	4.5	(1.9)	(2.2)
State & Local	(3.9)	0.4	(0.5)	(2.7)	(3.3)	(3.4)	(1.4)	(1.5)	(1.0)	(0.7)	(0.6)	(0.5)	(1.8)	(2.3)	(1.1)
Addenda:															
Final Sales (Q/Q)	0.8	3.0	1.7	4.2	0.0	1.0	1.8	1.8	1.9	2.1	3.0	2.7			
—Y/Y % Change	0.5	1.3	1.3	2.4	2.2	1.7	1.8	1.2	1.6	1.9	2.2	2.4	1.4	1.7	2.1
Nominal GDP (Q/Q)	5.5	5.4	3.9	4.2	3.1	3.3	3.5	2.7	3.3	3.2	3.3	3.0			
—Y/Y % Change	2.8	4.4	4.9	4.7	4.1	3.6	3.5	3.1	3.2	3.2	3.1	3.2	4.2	3.6	3.2
Inflation Measures															
Consumer Price Index (Y/Y %)	2.4	1.8	1.2	1.2	2.2	3.3	3.6	3.0	2.1	1.5	1.3	1.6	1.6	3.0	1.6
Core Consumer Price Index (Y/Y %)	1.3	1.0	0.9	0.6	1.1	1.5	1.8	2.0	1.9	1.7	1.5	1.5	1.0	1.6	1.6
Interest Rates															
Federal Funds (% , End of Period)	0.09	0.09	0.15	0.13	0.10	0.07	0.25	0.25	0.25	0.25	0.25	0.25			
Federal Funds (% , Annual Avg)													0.12	0.25	0.25
10-year Treasury Bond (% , Period Avg)	3.72	3.49	2.79	2.86	3.46	3.21	2.45	2.35	2.60	2.90	3.10	3.30	3.21	2.85	3.00
Others															
Industrial Production (Y/Y % Change)	1.5	6.5	6.9	6.3	5.5	3.9	2.9	2.7	2.2	2.8	3.0	3.2	5.3	3.7	2.8
Unemployment Rate (%)	9.7	9.6	9.6	9.6	8.9	9.1	9.3	9.4	9.5	9.5	9.5	9.4	9.6	9.2	9.5
Assumed WTI Price (\$/bbl)	78.6	77.9	76.2	85.0	94.0	102.6	88.2	86.0	87.1	87.7	89.5	90.5	79.4	92.7	88.7
Federal Budget Balance (\$bln, FY, Unified)													(1,300)	(1,300)	(1,000)
% of GDP													(9.0)	(8.5)	(6.8)
Corporate Earnings															
S&P 500 Oper EPS Pre-writeoffs (\$/share)	19.71	21.48	21.75	22.55	23.50	24.15	24.35	25.00	24.75	25.25	25.25	25.75	85.49	97.00	101.00
S&P 500 Oper EPS Pre-writeoffs (Y/Y %)	53.6	34.0	32.7	34.2	19.2	12.4	12.0	10.9	5.3	4.6	3.7	3.0	37.8	13.5	4.1
S&P 500 GAAP EPS (\$/share)	17.48	19.68	19.52	20.67	21.44								77.35	88.50	91.00
S&P 500 GAAP EPS (Y/Y %)	132.4	45.7	32.2	36.2	22.7								51.8	14.4	2.8

Sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Office of Management and Budget, Federal Reserve Board, First Call, and Citi Investment Research and Analysis.

Appendix 2

S&P 500 Earnings and Estimates

Annual Data:

	Pre-Write-off (Operating) Earnings (\$/Shr)	Year/Year Change (%)	Reported (GAAP) EPS (\$/Shr)	Year/Year Change (%)
Citi Estimates:				
2010	85.49	37.8	77.35	51.8
2011	97.00	13.5	88.50	14.4
2012	101.00	4.1	91.00	2.8
2013	105.50	4.5	94.00	3.3
2014	110.00	4.3	99.00	5.3
2015	115.00	4.5	101.00	2.0

Quarterly Data:

Actual:

1Q07	22.71	9.6	21.33	8.3
2Q07	24.40	9.4	21.88	8.8
3Q07	21.31	-5.7	15.15	-29.4
4Q07	16.04	-28.5	7.82	-61.4
1Q08	18.96	-16.5	15.54	-27.1
2Q08	19.78	-18.9	12.86	-41.2
3Q08	17.49	-17.9	9.73	-35.8
4Q08	5.56	-65.3	-23.25	-397.3*
1Q09	12.83	-32.3	7.52	-51.6
2Q09	16.03	-19.0	13.51	5.1
3Q09	16.39	-6.3	14.76	51.7
4Q09	16.80	202.2	15.18	165.3*
1Q10	19.71	53.6	17.48	132.4
2Q10	21.48	34.0	19.68	45.7
3Q10	21.75	32.7	19.52	32.2
4Q10	22.55	34.2	20.67	36.2
1Q11	23.50	19.2	21.44	22.7

Forecasts

2Q11	24.15	12.4		
3Q11	24.35	12.0		
4Q11	25.00	10.9		
1Q12	24.75	5.3		
2Q12	25.25	4.6		
3Q12	25.25	3.7		
4Q12	25.75	3.0		*absolute value change

Appendix A-1

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